



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

grooved rod of the ligula, that enlarges and diminishes the size of the sack lying behind it? It would seem that the bee has perfect control of this rod, that it is remarkably elastic, and capable of much extension and contraction. The rod and sack thus acting as a suction and force pump, as will be easily understood by one familiar with the parts.

Of course I cannot say that the bee makes this use of it, but I do say it should, and if it does not, it is pure stupidity on its part. And if some one demonstrates that I am all wrong now, evolution, at no distant day, will set me right, for there will be born a bee, less conservative, that will dare defy old usages, and take a new departure; that bee, trust me, will make use of this cunningly-devised apparatus, and produce honey cheaper than any competitor, excepting the glucose man, and I hope and trust may worry even him.

—:O:—

HISTORY OF THE BUFFALO.

BY CAPT. WM. E. DOYLE.

THE early adventurers to the new world gave quaint and oftentimes exaggerated descriptions of the novelties they encountered, and the "monarch of the plains" met with a due share of notice at their hands, as will be seen from the subjoined extracts from their narratives.

The first account we have of the buffalo is given by the explorer Guzman, who saw herds of them in Cinaloa, New Spain (Mexico), in 1532.

In 1539 Father Marco de Nica, in his expedition in search of the famed kingdom of Cibola, says that in the kingdom of Ahacus (now in New Mexico) "they showed me a hide halfe as big againe as the hide of a great oxe, and told me that it was the skin of a beast which has but one horne upon his forehead, and that this horne bendeth towards his breast, and that out of the same goeth a point right forward, wherein he hath so great strength, that it will break anything how strong soever it may be, if he runne against it, and that there are great store of these beasts in that countrey. The colour of the hide is of the colour of a great goat skinne, and the haire is a finger thick."

While De Sota was remaining at the town of Chiaha (now Rome, Ga.) in 1540, he detached Villabos and Silvera—two fear-

less soldiers—to explore the mountains to the north for gold. They returned July 9th, having found no gold, but mines of a highly colored copper used by the natives, who also gave them a hide which they supposed once covered a tremendous animal partaking of the qualities of the ox and the sheep, and much used by the natives, “which because the countrie was cold were very profitable, and served for coverlets because they were very soft and wooled like sheep. Not farre from thence towards the north were many oxen.” Subsequently when at Pacaha—west of the Mississippi—De Sota sent thirty horsemen northward to explore the country. At a poor town at which they stopped, they were informed that the country above was very cold and there were such store of oxen that they could keep no maize for them, but that the Indians lived upon their flesh.

Alvar Nunez Cabeza, the treasurer of the ill-fated Narvaez expedition, wandering from Florida to Mexico with his three companions—1528 to 1532—saw immense herds of buffalo, and from his account of them in his *Neufragios* received the appendix to his name “*de vaca*” (of the cattle). In speaking of the section west of the Mississippi, he says: “In that country there were grey and black cows, with long hair, no bigger than those of Barbary, and their flesh coarser than Spanish beef.”

In 1540, Coronado, in his celebrated expedition, first heard of buffalo at Cibola (Zuni), and says that the people: “travel eight days’ journey, into certain plains lying towards the North sea. In this country are certain skins well dressed, and they dress them and paint them where they kill their oxen, for so they say themselves.” He also saw an Indian there from another province who had a buffalo painted on his breast, and his chronicler, Castaneda, speaking of the hides, says they are “covered with a frizzled hair resembling wool.” After the expedition left Cicuić (Pecos) he says: “All that way and the plains are as full of crooked backed oxen as the Mountain Serena in Spain is of sheep, but there is no people but such as keep those cattle.”

Gomara gives the following description of the buffalo as seen by Coronado and his army: “Those oxen are of the bigness and color of our bulls, but their horns are not as great. They have a great bunch upon their fore shoulders, and more hair upon their fore part than on their hinder part, and it is like wool. They have great tufts of hair hanging down their foreheads, and it

seemeth they have beards, because of the great store of hair hanging down at their chins and throats. The males have very long tails, and a great knob or flock at the end, so that in some respects they resemble the lion and in some others the camel. They push with their horns, they run, they overtake and kill a horse when they are in their rage and anger. Finally it is a fierce beast of countenance and form of body. The horses fled from them, either because of their deformed shape or else because they had never seen them before. Their masters have no other riches or substance; of them they eat, they drink, they apparel, they shoe themselves; and of their hides they make many things, as houses, shoes, apparel and ropes; of their bones they make bodkins; of their sinews and hair, thread; of their horns, maws and bladders, vessels; of their dung, fire; and of their calf skins, budgets wherein they draw and keep water. To be short they make so many things of them as they have need of, or as may suffice them in the use of this life."

In 1585 Espejo, returning from his exploration of Northern New Spain, says that he traveled down a river "called Rio de las Vacas (that is to say the River of Oxen, now the Pecos, in Texas) in respect of the great multitude of oxen or kine that fed upon the banks thereof, by the which they travelled for the space of 120 leagues—still meeting with store of the said cattell."

Sir Humphrey Gilbert, whose voyages commenced in 1583, says there are in Newfoundland, "buttolfes, or a beast, it seemeth by the tract and foot very large in maner of an ox," and in a work published by Hakluyt in London (1589), it is stated that in the island of Newfoundland were found "mightie beastes like to camels in greatnesse and their feete were cloven. I did see them farre off, not able to discern them perfectly, but their steps shewed that their feete were cloven and bigger than the feete of camels. I suppose them to be a kind of Buffes, which I read to bee in the countreys adjacent, and very many in the forine land."

Another author, Purchas, says that as early as 1613 the adventurers in Virginia discovered a "slow kinde of cattel as bigge as kine, which were good meate."

A work published at Amsterdam in 1637, by Thomas Morton, called "New English Canaan," contains the following: "The Indians have also made description of great heards of well grown beasts, that live about the parts of this lake (Erocoise) such as

the christian world (until this discovery) hath not bin made acquainted with. These beasts are of the bigness of a cowe, their flesh being very good foode, their hide good leather; their fleeces very useful, being a kind of woole, as fine almost as the woole of the beaver, and the salvages do make garments thereof. It is tenne yeares since first the relation of these things came to the eares of the English."

Joliet and Marquette, descending the Mississippi in 1673, saw immense herds of buffalo, and the latter thus discourses of them: "We call them wild cattle, because they are like our domestic cattle, they are not longer, but almost as big again, and more corpulent; our men having killed one, three of us had considerable trouble in moving it. The head is very large, the forehead flat and a foot and a-half broad between the horns, which are exactly like our cattle, except that they are black and much larger. Under the neck there is a kind of large crop hanging down, and on the back a pretty high hump. The whole head, the neck, and part of the shoulders, are covered with a great mane like a horses; it is at least a foot long, which renders them hideous, and falling over their eyes prevents their seeing before them. The rest of the body is covered with a coarse curly hair like the wool of our sheep, but much stronger and thicker. It falls in summer, and the skin is then as soft as velvet. At this time the Indians employ the skins to make beautiful robes, which they paint of various colors."

The first engraving of the buffalo appeared in the first edition of Father Hennepin's travels.

Jontel in 1685 saw buffalo at Bay St. Bernards, and the same year La Salle's party found them on a river in Texas which they named La Vaca, from that circumstance Charlevoix in one part of his works calls them "Illinois cattle." In 1756 some of those who settled in the Abbeville district of South Carolina found buffalo there, and in 1774 Bernard Roman speaks of them as a "benefit of nature conferred on Florida." In 1769 Daniel Boone and Finley found them in small numbers in the valleys near the Cumberland mountains, but came across a large herd in a valley at the west foot of the Alleghany mountains. Boone remarked to his companion: "Job of Uz had not larger droves of cattle than we." Father Venzas does not include the buffalo among the animals of California, neither Harmon nor Mackenzie speak

of them as being in New Caledonia, and Du Pratz says they did not exist in Lower Louisiana.

In the last century the trade in buffalo wool became brisk, and numerous factories were established for its manufacture into cloth.

The buffalo roamed in small herds all over the country before the advent of the white man, but only on the plains were those immense herds, so often described, ever seen. The prairie was its favorite resort. The railroads and settlements have, however, broken these herds into small bodies, and the unrestrained slaughter of buffalo in the past few years has so reduced their numbers that their extinction is a question of a very short time.

Buffalo make good tractable work cattle when caught young, and the *Bois Brules* frequently use them as such.

White buffalo have frequently been seen and killed. All the Indian tribes regard them as "big medicine" but they have different superstitions regarding them. For instance, Catlin, the painter, while among the Mandans in 1832, saw a white buffalo robe erected on a pole in their village as a sacrifice to the great spirit. It had been purchased from the Blackfeet, who killed the buffalo, for eight horses and a quantity of goods. On the other hand the Comanches believe it very dangerous to see a white buffalo. In 1869 I saw a young Comanche, who had seen a white buffalo, return to his camp almost dead with fear. He was taken into his tent, the medicine men were sent for, and they smoked him and kept up incantations over him day and night for a week. When he came out he believed that he had a very narrow escape from death. In 1869 a white buffalo was killed by a white man on the north fork of the Red river, I. T., and the hide presented to Gen. Grierson. He desired to have it dressed to preserve it, but failed to get any Indian to undertake the task for a long time. At last he prevailed on a Comanche chief named "Horseback" to have the operation performed. "Horseback" selected one of his squaws, had the "medicine men" of his band go through various ceremonies over her to preserve her life, and then placed her in a teepee some distance from his camp, where the hide was taken to her by a soldier and brought away by him when dressed. No other Indian would look at the hide, much less touch it. Her food was left for her at some distance from her teepee, and when the robe was dressed, "medicine" ceremonies were held over her before she was allowed to rejoin the

camp. I twitted "Horseback" about the fear of the robe, calling his attention to the fact that no harm befell any of the white men who handled the robe, but he answered that such might be the case, but what was "bad medicine" for a Comanche might be "good medicine" for a white man, and *vice versa*. He proposed to take no risks in the matter.

A white buffalo (stuffed) was on exhibition at the Centennial Exposition, the property of R. M. Wright, of Kansas, and it is a pity that it was not secured by the Smithsonian or some other institution for preservation.

—:O:—

EDITORS' TABLE.

EDITORS: A. S. PACKARD, JR., AND E. D. COPE.

— The tariff laws of the United States are in some respects a direct tax on intellectual progress, and although it is not unlikely that this result is entirely due to oversight on the part of the framers of those laws, the consequences are none the less injurious. Some of our contemporaries doubtless remember the difficulties experienced by Alvan Clark & Sons, of Cambridge, in procuring unwrought optical glass, for use in building the telescopes for which their house is so highly esteemed. The high tariff on these rough discs operated as a prohibition to the manufacture of the optical instruments to which they are necessary. This result was probably not anticipated by our legislators. After prolonged negotiations, special dispensations from the Treasury Department have permitted the discs to pass free if for schools, colleges or academies, otherwise a duty of 10 p. c. is exacted.

The law with regard to "specimens of Natural History," that is, those relating to botany, zoölogy, palæontology, geology and mineralogy, imposes a heavy duty on them when they are intended for sale, or are not designed for exhibition in a public institution. As the greater number of specimens of this kind are obtained by persons who depend on their sale for reimbursement, it is evident that students in this country must pay the tax, or go without them. The actual result is, that students and institutions being mostly poor, do not purchase, and sellers must pocket the loss. So well known has this become, that such objects nearly all now go to Europe, to the impoverishment of science here, and